

The Wedgie Sled

My Wedgie sled is made of Corian. I like the stability of the material but you can make yours out of MDF, Melamine or what ever you choose.

The fences shown at the right are made to be reversible for both left and right tilt table saws.

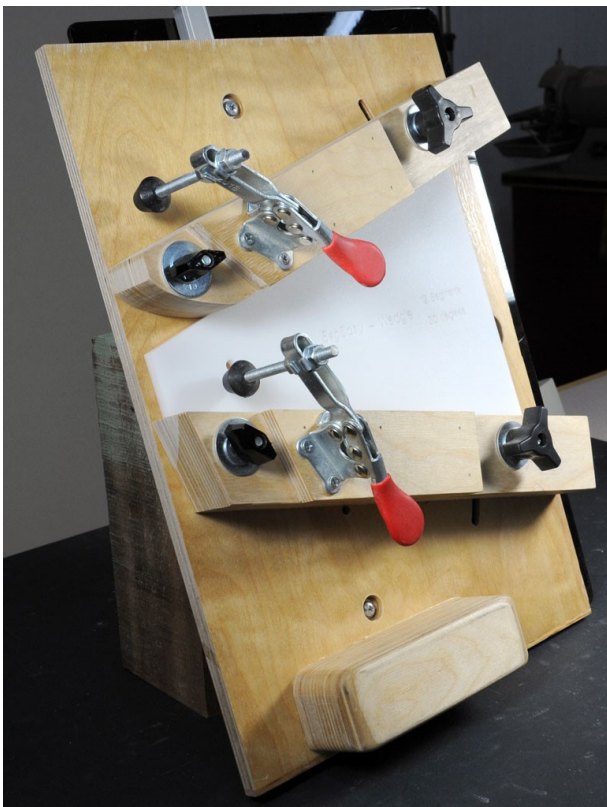
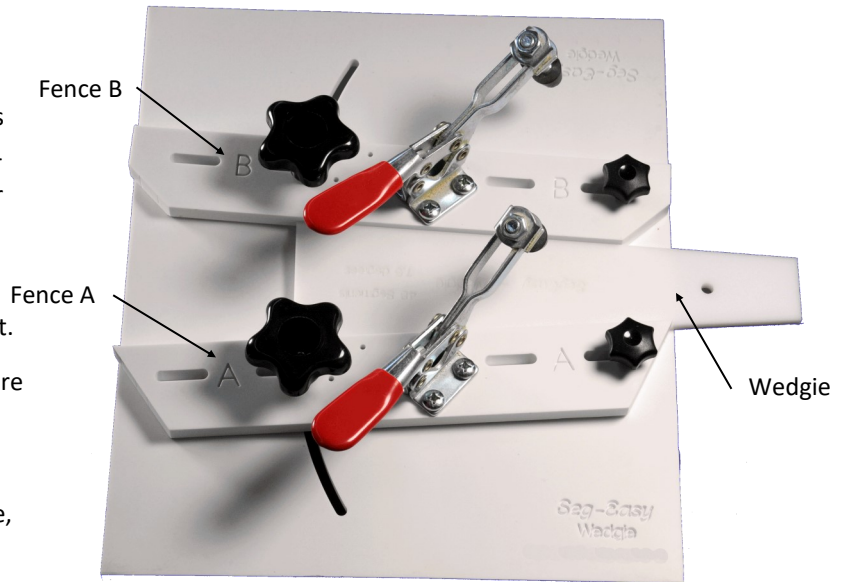
The dimensions are not critical. The height of this fence works well with a segment thickness of 3/4 inch or less. Thicker segments will require a taller fence appropriate to the material.

The upper fence B must be ripped absolutely parallel and the edges of both fences must be flat.

All hardware is 1/4 inch. The hold down clamps are best positioned back from the blades as shown.

The distance between the fences determine the maximum width of segment material you can use, adjust as necessary.

A total of 82 Wedgie configurations are available from www.segeasy.com.

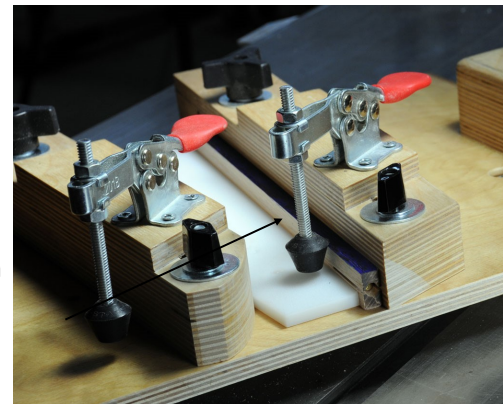


This Wedgie sled was made by Kendall Westbrook. He made the fences taller to accommodate the large segments he uses in his vessels. He also modified the distances between the fences for wider strip material. Making the fences absolutely parallel took some effort. One particularly helpful addition was the handle block at the bottom.

With a wider fence separation, a spacer strip may be necessary to correctly locate a higher segment Wedgie such as the 48 as shown.

Of course the spacer strip must be perfectly parallel.

The Wedgie method is forgiving and you can modify the sled to accommodate what you need.



The Wedgie Sled

Making The Base

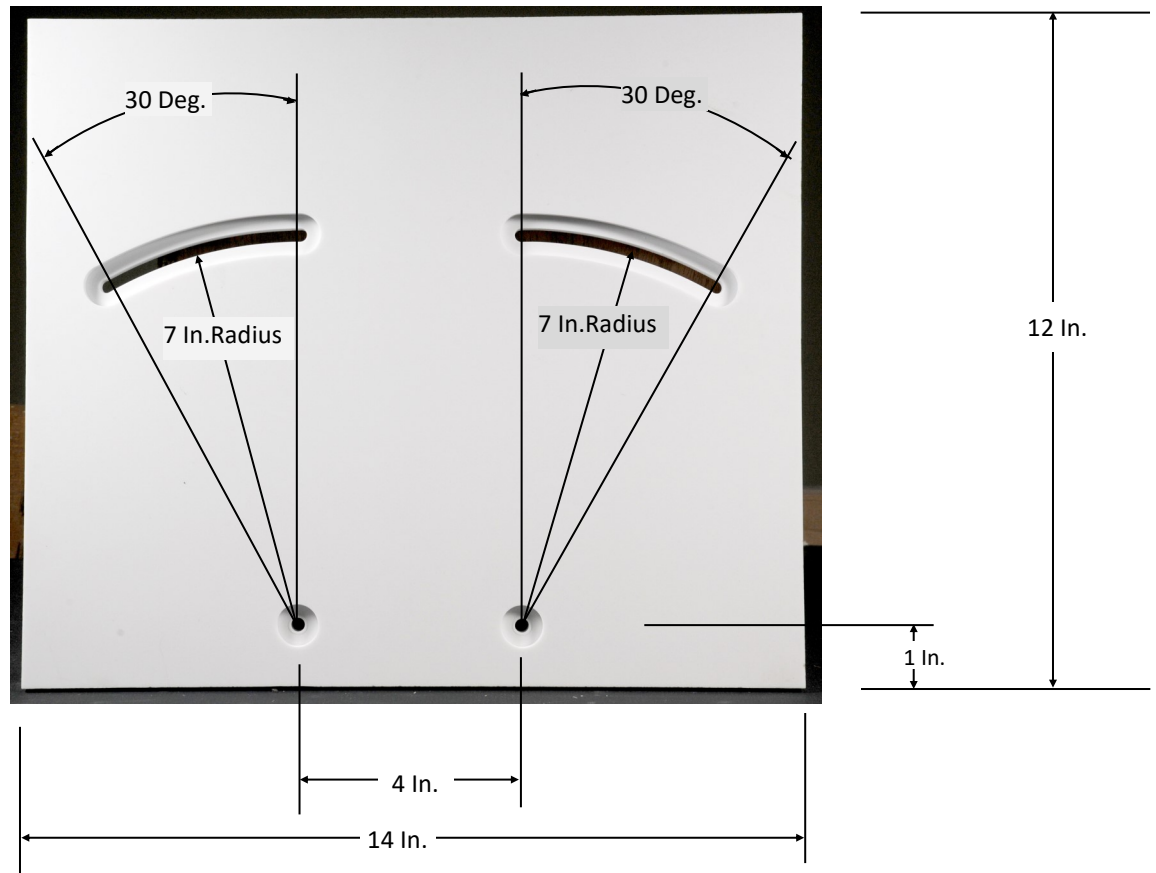
From the backside:

Cut a groove all the way through with a 1/4 inch straight router bit. You might have to make 2-3 passes.

Cut a 3/16 inch deep retaining groove with a 3/4 inch flat bottom router bit

Note:

This layout works for both left and right tilt saws.



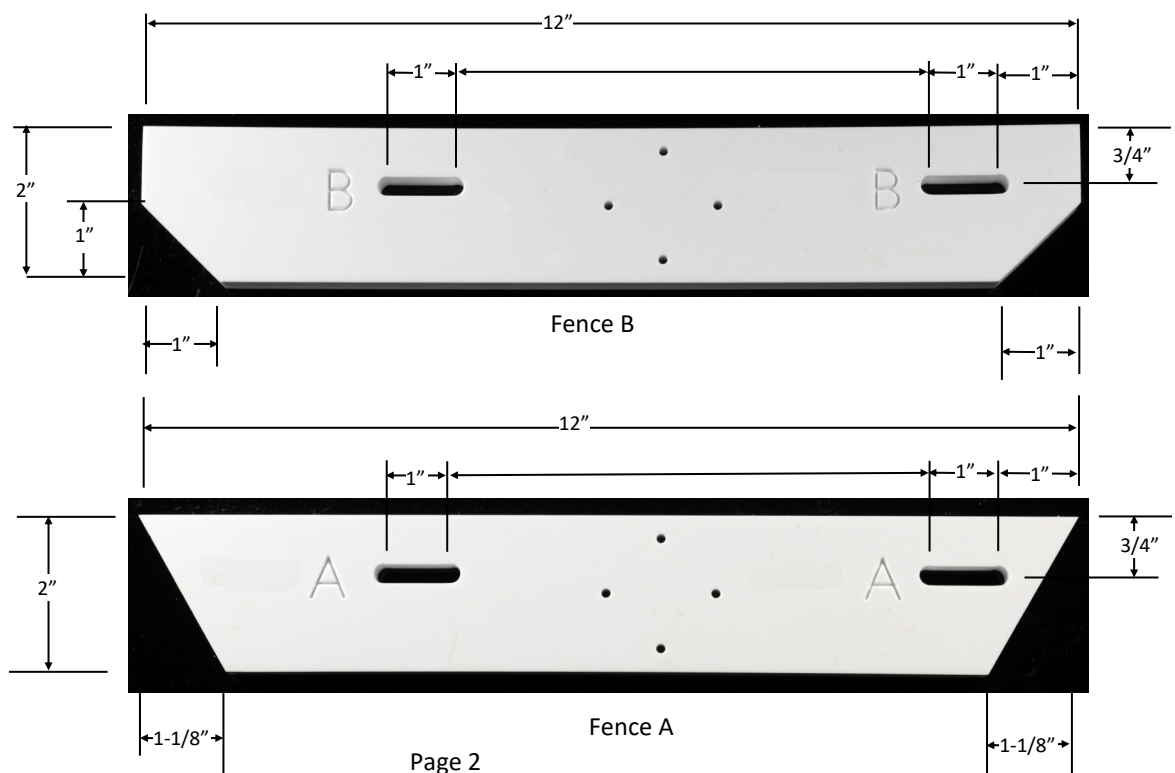
Making The Fences

The fences will work on a left or right tile saw. For a left tilt saw, simply flip them over.

Use a 1/4 inch router bit and an appropriate jig to make the slots.

The holes for the hold-down clamps are not dimensioned as these clamps vary considerably.

Take care when ripping the fences. Fence B must be absolutely parallel.

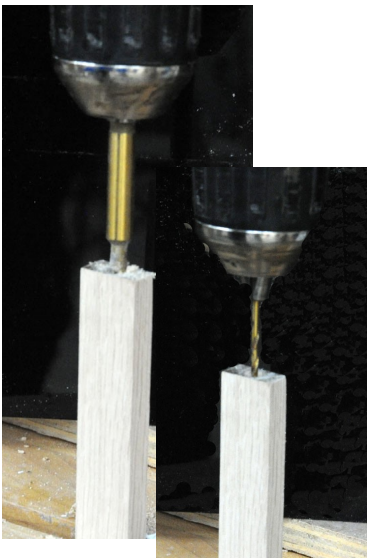
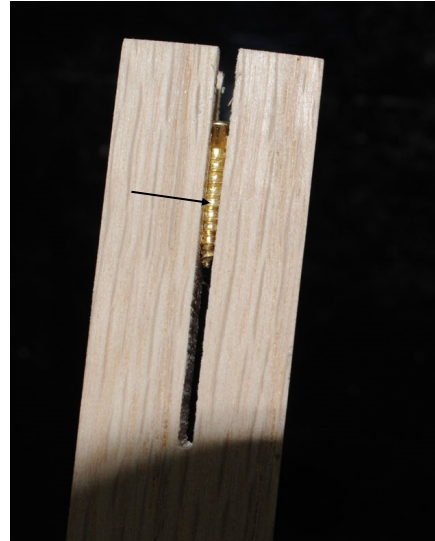


The Wedgie Sled

Making an Adjustable Track Slide

I like a simple wood track for sleds. The problem with any track is a dependable, easy adjustment system. For the sled to perform well every time you use it, a track slide that is easy to adjust is a must. Even the slightest lateral movement in the sled will translate into an angle change in the segment.

This slide has an adjustment screw in each end that can be immediately accessed and adjusted with the sled in place, no guesswork. The screw serves as a wedge to spread the slide end apart in the saw slot. It is deceptively simple and dependable.



Cut a strip of maple, oak or poplar that will slide easily in the saw slot. Make the thickness a little less than the slot depth. The length can be the same as the sled or a slightly longer.

Mark the center of the end and with a 1/4 inch Forsner bit, drill a 1/4 inch deep hole.

With a 3/32 bit, drill to a depth of 5/8 inch from the end.



Cut a slot down the center of the slide about 1-1/2 inches long.



Install a no 4 brass wood screw flush with the end of the strip. It will be adjusted later to correctly fit in the saw slot.

The Wedgie Sled

Mounting The Track Slide



Measure from the outside of the blade to the inside of the saw slot.

The placement of the track does not have to be perfect. A regular tape measure is fine.

Transfer this measurement to the Wedgie sled. This allows a saw blade's width for trimming of the sled.

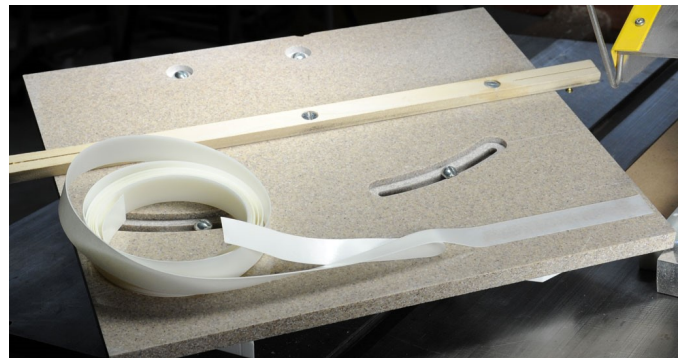


With double stick tape the full length of the slide, mount with the inside of the slide to the marks.

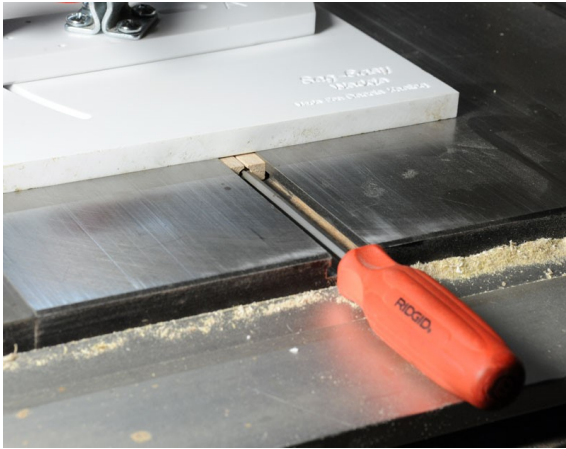
Drill, tap and countersink for a 1/4 inch flathead machine screw.

Add Anti-friction UHMW tape to the sled.

The tape serves also to elevate the sled slightly to help match top of the zero clearance strip.



The Wedgie Sled

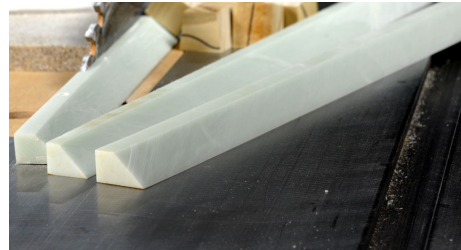


Crank the saw blade all of the way down and put the sled in place.

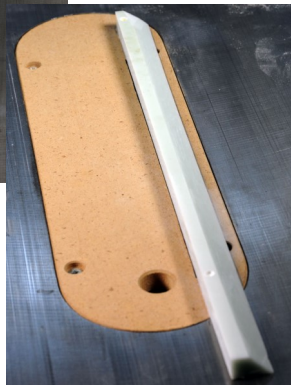
Adjust each end of the track slide until there is no lateral play but still has easy sled movement.

Making a Zero Clearance Ramp Strip

Start out by cutting several strips about 1 inch wide with a 45 degree bevel on one edge. As the strips are consumable it makes sense while you are doing it to make several. Do not even think of cutting segments without a zero clearance strip.



With the Wedgie sled in place as shown, stick down the ramp strip to an MDF plate saw insert. Make sure the strip is against the sled.



Drill, tap and countersink holes for a 10-24 machine screw through the insert and ramp strip. Do this on both ends. The ramp strip must not protrude above the sled. If it does, sand down until level or slightly below.



The Wedgie Sled

With the Wedgie sled in place, turn on the saw and bring the blade up through the ramp strip until at the optimum cutting height. Take care to not extend the blade above this height as we want zero clearance in front of the blade as well as the side.



The ramp encourages the segments to fall away from the blade. They can pile up and encroach on the blade. Before this happens, **stop the saw** and move them out of the way. This picture is without the blade guard. I never cut segments without the guard.

